# Bureau of Engraving and Printing

FY 2015 Capital Investment Plan **Investment Name:** Consolidated Facility Improvements

Type of Investment: Major Non-IT Investment

# **Description:**

The consolidated facility improvement projects include minor office renovations and structural upgrades to the Washington, DC and Fort Worth, TX facilities.

**Investment Anticipated Outlay: (In Millions of \$):** 

Туре	PY-1 and Prior	PY 2013	CY 2014	BY 2015	BY+1 2016	BY+2 2017	BY+3 2018	BY+4 and Beyond	Total
DME Sub Total (Including Gov FTE) Costs	0.00	0.89	8.78	5.21	0.00	0.00	0.00	0.00	14.87
O&M Sub Total (Including Gov FTE) Costs	0.00	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.50
Total Cost (Including Gov FTE)	0.00	1.39	8.78	5.21	0.00	0.00	0.00	0.00	15.37
Total Gov FTE Cost	0.00	1.39	8.78	5.21	0.00	0.00	0.00	0.00	15.37
Number of FTE represented by costs	0.00	0.00	0.00	0.00					0.00

## **Summary of Purpose, Goals, and Benefits:**

Consolidated facility improvement projects include minor renovations, safety and structural upgrades to BEP facilities.

The performance of this investment will be evaluated through the following two measures:

- 1. Comparison of the workflows before and after project completion
- 2. Customer satisfaction survey results

## **Return on Investment:**

The anticipated benefit(s) of the investment:

- 1. Improve safety
- 2. Reduce environmental hazards
- 3. Increase efficiencies.

## **Requirements/ Benefits/ Mandates:**

Legislative Mandate: N/A

Audit Finding or Material Weakness: N/A

Agency Strategic Plan / Annual Performance Plan: N/A

Presidential Priority: N/A Other Requirement: N/A

# **Planned Objectives and Accomplishments:**

FY 2015:

- 1. Award AE Design contract FY15. (start 10/01/14; end 09/30/15)
- 2. Award contract for construction (start 10/01/14; end 09/30/15).

**Investment Name:** Currency Sheet Accountability System

Type of Investment: Major Non-IT Investment

# **Description:**

This investment will develop accountability for currency sheets from start to finish in the currency manufacturing process. The systems will be outfitted with the necessary sensing equipment to track individual sheets of currency paper upon delivery.

# **Investment Anticipated Outlay: (In Millions of \$):**

Туре	PY-1 and Prior	PY 2013	CY 2014	BY 2015	BY+1 2016	BY+2 2017	BY+3 2018	BY+4 and Beyond	Total
DME Sub Total (Including Gov FTE) Costs	0.00	0.00	0.00	6.00	0.00	0.00	0.00	0.00	6.00
O&M Sub Total (Including Gov FTE) Costs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Cost (Including Gov FTE)	0.00	0.00	0.00	6.00	0.00	0.00	0.00	0.00	6.00
Total Gov FTE Cost	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Number of FTE represented by costs	0.00	0.00	0.00	0.00					0.00

# Summary of Purpose, Goals, and Benefits:

The purpose of this investment is to develop an automated currency sheet accountability system on one production line at the Washington DC Facility to evaluate operational and interface requirements for potential full deployment of a sheet accountability system on all production lines. A currency automated sheet accountability system would replace a manual process and provide BEP with the capability to electronically track and account for currency sheets throughout the production process, from blank sheets to finished notes. Implementing this system would afford BEP better control and accountability of printed and unprinted sheets on the production floor, and would eliminate sheet count variances that sometime occur between production steps.

Performance will be measured and evaluated by tying consumables to specific sheets and individual notes via serial number.

# **Return on Investment:**

Anticipated benefit(s) of the investment:

- 1. Enhanced security and accountability
- 2. Facilitates comprehensive quality control and tracking of production
- 3. Full sheet and note counting verified at each production step
- 4. Real time data will be available to assist in decision making.

## **Requirements/ Benefits/ Mandates:**

Legislative Mandate: N/A

Audit Finding or Material Weakness: N/A

Agency Strategic Plan / Annual Performance Plan: N/A

Presidential Priority: N/A Other Requirement: N/A

**Investment Name:** ECF Visitor Center

Type of Investment: Major Non-IT Investment

## **Description:**

To renovate the Tour and Visitor Center at the Washington, DC facility which has not been renovated in over 20 years.

# **Investment Anticipated Outlay: (In Millions of \$):**

Туре	PY-1 and Prior	PY 2013	CY 2014	BY 2015	BY+1 2016	BY+2 2017	BY+3 2018	BY+4 and Beyond	Total
DME Sub Total (Including Gov FTE) Costs	0.00	0.00	0.50	3.50	0.00	0.00	0.00	0.00	4.00
O&M Sub Total (Including Gov FTE) Costs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Cost (Including Gov FTE)	0.00	0.00	0.50	3.50	0.00	0.00	0.00	0.00	4.00
Total Gov FTE Cost	0.00	0.00	0.50	3.50	0.00	0.00	0.00	0.00	4.00
Number of FTE represented by costs	0.00	0.00	0.00	0.00					0.00

# **Summary of Purpose, Goals, and Benefits:**

The BEP is one of the most popular tourist attractions in the Washington, DC area. This investment will renovate the Bureau of Engraving and Printing's (BEP) Washington, DC Tour and Visitor Center for safety reasons. Each year approximately 200,000 tourists take the BEP's free public tour to see our Nation's currency being printed and to learn about newly designed currencies, their security features and new printing technologies. The tour facility consists of a long entrance area (tour-bridge) where visitors view a short film on the BEP's history and production process, an elevated tour walkway over the production floor, and a visitor center consisting of gift shops and a small amount of educational exhibits. Over the last 20 years there have been few upgrades made to the tour facility's infrastructure and exhibits. As a result, the tour has become antiquated and is in dire need of structural repair and renovation.

Performance of this investment will be measured and evaluated by monitoring the percentage of customer satisfaction survey results rated good or better.

# **Return on Investment:**

The anticipated benefit(s) of the investment:

- 1. Improve Safety and Environmental Hazards
- 2. Improve customer and public satisfaction.

# **Requirements/ Benefits/ Mandates:**

Legislative Mandate: N/A

Audit Finding or Material Weakness: N/A

Agency Strategic Plan / Annual Performance Plan: N/A

Presidential Priority: N/A Other Requirement: N/A

#### **Accomplishments:**

FY 2014: Award AE Design Contract.

## Planned Objectives and Accomplishments:

FY 2015: Award contract for construction.

**Investment Name:** Integrated Security System-HSPD-12

Type of Investment: Major Non-IT Investment

# **Description:**

The project includes complete replacement of the security systems at both the BEP's Washington, DC and Ft Worth, TX facilities. Currently the systems do not have redundant or inter-operable capability.

# **Investment Anticipated Outlay: (In Millions of \$):**

Туре	PY-1 and Prior	PY 2013	CY 2014	BY 2015	BY+1 2016	BY+2 2017	BY+3 2018	BY+4 and Beyond	Total
DME Sub Total (Including Gov FTE) Costs	0.00	0.16	4.00	13.00	0.00	0.00	0.00	0.00	17.16
O&M Sub Total (Including Gov FTE) Costs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Cost (Including Gov FTE)	0.00	0.16	4.00	13.00	0.00	0.00	0.00	0.00	17.16
Total Gov FTE Cost	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Number of FTE represented by costs	0.00	0.00	0.00	0.00					0.00

# **Summary of Purpose, Goals, and Benefits:**

This project includes complete replacement of the security systems at the Washington, DC and Fort Worth, TX facilities. By acquiring a new Integrated Security System the BEP will be in full compliance with the Homeland Security Presidential Directive 12 (HSPD 12).

## **Return on Investment:**

Anticipated benefit(s) of the investment:

- 1. Common hardware and software operating platforms
- 2. Allow each facility to be the back-up for the other
- 3. Compliance with HSPD-12

## Requirements/ Benefits/ Mandates:

Legislative Mandate: N/A

Audit Finding or Material Weakness: N/A

Agency Strategic Plan / Annual Performance Plan: N/A

Presidential Priority: N/A
Other Requirement: N/A

**Investment Name:** Manufacturing Support Equipment

Type of Investment: Major Non-IT Investment

# **Description:**

To purchase minor equipment to support the manufacturing of U.S. currency.

# **Investment Anticipated Outlay: (In Millions of \$):**

Туре	PY-1 and Prior	PY 2013	CY 2014	BY 2015	BY+1 2016	BY+2 2017	BY+3 2018	BY+4 and Beyond	Total
DME Sub Total (Including Gov FTE) Costs	0.00	3.98	15.05	1.25	0.00	0.00	0.00	0.00	20.28
O&M Sub Total (Including Gov FTE) Costs	0.00	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.50
Total Cost (Including Gov FTE)	0.00	4.48	15.05	1.25	0.00	0.00	0.00	0.00	20.78
Total Gov FTE Cost	0.00	3.98	15.05	1.25	0.00	0.00	0.00	0.00	20.28
Number of FTE represented by costs	0.00	0.00	0.00	0.00					0.00

# Summary of Purpose, Goals, and Benefits:

The project is a multi-year project that replaces older, fully depreciated manufacturing support equipment at both BEP's facilities. Replacing out of date equipment on a regular basis allows BEP to more cost effective and efficient in meeting customer requirements for the production of currency notes. New manufacturing support equipment is typically more energy efficient, eco-friendly and reduces machine down time. In addition, new support equipment acquired by BEP has the technical capability of producing the next generation of advanced counterfeit deterrence features for future design enhancements.

The performance of this investment will be evaluated through the following two measures:

- 1. Comparison of productivity of new equipment with existing equipment.
- 2. Comparison of spoilage rates of new equipment with rates of existing equipment.

## **Return on Investment:**

The anticipated benefit(s) of the investment:

- 1. Produce notes at a lower cost with higher quality
- 2. Enhance counterfeit deterrence
- 3. Improve productivity
- 4. Improve customer and public satisfaction.

#### **Requirements/ Benefits/ Mandates:**

Legislative Mandate: N/A

Audit Finding or Material Weakness: N/A

Agency Strategic Plan / Annual Performance Plan: N/A

**Presidential Priority:** N/A **Other Requirement:** N/A

## **Accomplishments:**

N/A.

#### **Planned Objectives and Accomplishments:**

FY 2015: Award contract for manufacturing support equipment

**Investment Name:** Retooling

Type of Investment: Major Non-IT Investment

## **Description:**

Retooling is a multi-year project that replaces older, fully depreciated production equipment at both BEP's facilities. Replacing out of date equipment on a regular basis allows BEP to more cost effective and efficient.

# **Investment Anticipated Outlay: (In Millions of \$):**

Туре	PY-1 and Prior	PY 2013	CY 2014	BY 2015	BY+1 2016	BY+2 2017	BY+3 2018	BY+4 and Beyond	Total
DME Sub Total (Including Gov FTE) Costs	0.00	15.72	1.70	33.40	0.00	0.00	0.00	0.00	50.82
O&M Sub Total (Including Gov FTE) Costs	0.00	0.36	0.00	0.00	0.00	0.00	0.00	0.00	0.36
Total Cost (Including Gov FTE)	0.00	16.08	1.70	33.40	0.00	0.00	0.00	0.00	51.18
Total Gov FTE Cost	0.00	16.08	1.70	33.40	0.00	0.00	0.00	0.00	51.18
Number of FTE represented by costs	0.00	0.00	0.00				0.00		0.00

# **Summary of Purpose, Goals, and Benefits:**

Retooling is a multi-year project that replaces older, fully depreciated production equipment at both BEP's facilities. Replacing out of date equipment on a regular basis allows BEP to more cost effective and efficient in meeting customer requirements for the production of currency notes. New equipment is typically more energy efficient, eco-friendly and machine down time is reduced. In addition, new equipment acquired by BEP has the technical capability of producing the next generation of advanced counterfeit deterrence features for future design enhancements.

The performance of this investment will be evaluated through the following two measures:

- 1. Comparison of productivity of new equipment with existing equipment.
- 2. Comparison of spoilage rates of new equipment with rates of existing equipment.

#### **Return on Investment:**

The anticipated benefit(s) of the investment:

- 1. Produce notes at a lower cost with higher quality
- 2. Enhance counterfeit deterrence
- 3. Improve productivity
- 4. Improve customer and public satisfaction

## **Requirements/ Benefits/ Mandates:**

Legislative Mandate: N/A

Audit Finding or Material Weakness: N/A

Agency Strategic Plan / Annual Performance Plan: N/A

Presidential Priority: N/A Other Requirement: N/A

## **Planned Objectives and Accomplishments:**

FY 2015: 1. Award contract for equipment

<u>Investment Name:</u> Screen Press (Tactile Feature Development)

Type of Investment: Major Non-IT Investment

## **Description:**

This investment is to purchase a single commercial silk screen press to test the technology's capability to produce tactile features that provide meaningful access to U.S. currency for the blind and visually impaired.

# **Investment Anticipated Outlay: (In Millions of \$):**

Туре	PY-1 and Prior	PY 2013	CY 2014	BY 2015	BY+1 2016	BY+2 2017	BY+3 2018	BY+4 and Beyond	Total
DME Sub Total (Including Gov FTE) Costs	0.00	0.00	5.00	0.00	0.00	0.00	0.00	0.00	5.00
O&M Sub Total (Including Gov FTE) Costs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Cost (Including Gov FTE)	0.00	0.00	5.00	0.00	0.00	0.00	0.00	0.00	5.00
Total Gov FTE Cost	0.00	0.00	5.00	0.00	0.00	0.00	0.00	0.00	5.00
Number of FTE represented by costs	0.00	0.00	0.00	0.00					0.00

# **Summary of Purpose, Goals, and Benefits:**

The acquisition of a test press will give the BEP the ability to perform production test and validations of the technology's capability of meeting the specifications of US currency notes. The press will be used to test the application of proposed tactile features for future note designs in accordance with the public requirement to the blind and visually impaired community, as well as provide continued advancements in security banknote printing by utilizing a wide range of materials and designs to improve counterfeit deterrence.

This equipment provides the BEP with the means to test and utilize a wider range of materials and designs available to keep pace with the changing advancements in security banknote printing occurring throughout the world. The test press would also provide the Bureau with the capability of exploring changes to current more costly methods of applying security features, i.e. Optically Variable Inks (OVI) in an effort to decrease cost and enhance features.

The performance of this investment will be measured and evaluated by notes being accepted by the FRB and visually impaired and blind community.

## **Return on Investment:**

Anticipated benefit(s) of the investment:

- 1. Apply a tactile feature on future note designs
- 2. Enhance counterfeit deterrence.

## **Requirements/ Benefits/ Mandates:**

Legislative Mandate: N/A

Audit Finding or Material Weakness: N/A

Agency Strategic Plan / Annual Performance Plan: N/A

**Presidential Priority:** N/A **Other Requirement:** N/A

**Investment Name:** Single Note Inspection (SNI)

Type of Investment: Major Non-IT Investment

# **Description:**

This investment is to use single note inspection in production to process rejected sheets at OCIS and LEPE and to eliminate the unnecessary destruction of good notes.

## **Investment Anticipated Outlay: (In Millions of \$):**

Туре	PY-1 and Prior	PY 2013	CY 2014	BY 2015	BY+1 2016	BY+2 2017	BY+3 2018	BY+4 and Beyond	Total
DME Sub Total (Including Gov FTE) Costs	0.00	7.15	6.41	11.49	0.00	0.00	0.00	0.00	25.05
O&M Sub Total (Including Gov FTE) Costs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Cost (Including Gov FTE)	0.00	7.15	6.41	11.49	0.00	0.00	0.00	0.00	25.05
Total Gov FTE Cost	0.00	7.15	6.41	11.49	0.00	0.00	0.00	0.00	25.05
Number of FTE represented by costs	0.00	0.00	0.00	0.00					0.00

## **Summary of Purpose, Goals, and Benefits:**

The primary goal of this investment is to acquire the equipment and capability needed to inspect individual NextGen (NXG) \$100 notes as requested by the Federal Reserve Board to ensure all notes in circulation adhere to strict production standards.

During the initial production of the new NXG\$100 banknotes, BEP experienced creasing and other production defects which could not be detected with existing inspection equipment. BEP's existing inspection equipment is designed to identify print defects, not specific paper defects or production related anomalies. Since the \$100 denomination banknote is the premier international note issued by the Federal Reserve Board (FRB) and used worldwide, BEP discontinued production until the source of these problems could be identified and inspected. As a result, the Federal Reserve Board requested the Bureau to use Single Note Inspection for the finished NXG\$100 notes held in our vaults before they will accept the notes for issuance into circulation.

In the future, BEP plans to incorporate single note inspection into the production process to eliminate the unnecessary destruction of good notes. The implementation of SNI into the production process will assist BEP in maintaining the high quality standards of banknotes being delivered to the FRB. SNI will eliminate the opportunity of poor quality notes being placed in circulation and improves counterfeit enforcement's identification abilities. BEP expects to redesign United States currency every seven to ten years in an effort to stay ahead of counterfeiters as advances in technology make counterfeiting of currency less difficult. SNI provides greater assurance that new features have been properly replicated and manufacturing processes are consistent.

The performance of this investment will be evaluated through the following three measures:

- 1. Percent of \$100NXG notes recovered currently in BEP vaults.
- 2. Percent of recovering good notes from the rejected subject sheets
- 3. Percent of spoilage

# **Return on Investment:**

Anticipated benefit(s) of the investment:

- 1. Improve the quality of notes in circulation
- 2. Reduce spoilage
- 3. Improve counterfeit deterrence
- 4. Recover good notes from rejected sheets
- 5. Fewer Manual Functions
- 6. Improved Customer Satisfaction

# **Requirements/ Benefits/ Mandates:**

Legislative Mandate: N/A

Audit Finding or Material Weakness: N/A

Agency Strategic Plan / Annual Performance Plan: N/A

Presidential Priority: N/A Other Requirement: N/A